GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO:1855
ANSWERED ON:28.07.2016
Siltation in Rivers
Chudasama Shri Rajeshbhai Naranbhai

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

(a) whether the National Water Policy, 2012 incorporates directions with regard to the rivers in the country and if so, the details thereof;

(b) whether the Government has assessed the rate of siltation in rivers in the country including hilly and plain areas;

(c) if so, the details thereof along with the period fixed for re-assessment of silt speed in rivers;

(d) whether the silt speed has been affected due to construction of dams on these rivers; and

(e) if so, the details along with corrective measures taken in this regard?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(DR SANJEEV KUMAR BALYAN)

(a) Yes Madam. The National Water Policy, 2012 has inter-alia provisions with regard to the rivers in the country as enclosed at Annexure-I

(b) & (c) A committee headed by Dr B.K.Mittal, Former Chairman, Central Water Commission (CWC) had in 2006 studied the siltation pattern in few rivers in India and concluded that siltation was not pronounced and alarming. Recently, morphological studies of some Indian rivers have also been awarded by CWC to IIT Roorkee (Ganga, Sharda and Rapti), IIT Delhi (Kosi, Bagmati and Yamuna), IIT Guwahati (Brahmaputra, Subansiri and Pagladia), IIT Madras (Krishna and Tungbhadra), IIT Kharagpur (Mahanadi, Mahananda and Hoogly) and SVNIT Surat (Tapi).
The Ministry had in May, 2016 constituted a Committee on Erosion and Siltation in Rivers (ECESR) under Chairmanship of Director, CWPRS, Pune to study the problems of erosion, siltation and requirement of de-siltation/dredging of rivers, particularly in Ganga and Brahmaputra rivers and suggest remedial measures.

(d) Rivers carry silt load as per their regime conditions i.e. discharge in the river, river slope, morphology, nature of silt etc. The movement of silt in a river is affected due to construction of any barrier like dam across it. However, the rivers pick up and drop their silt load as per their regime condition.

(e) Siltation and erosion is a major problem in Indian rivers leading to loss of land and properties due to river bed/bank erosion and damages due to floods caused by spilling river water as a result of siltation of rivers. Various measures such as catchment area treatment, soil conservation measures such as terracing, bunding, trenching, vegetative barriers etc are given priority.
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ANNEXURE REFERRED TO IN PART (b) OF LOK SABHA UNSTARRED QUESTION No. 1855 FOR ANSWER ON 28.07.2016
Annexure I

The National Water Policy, 2012 has inter-alia following specific provisions with regard to the rivers in the country:
Para 2.3 There is a need for comprehensive legislation for optimum development of inter-State rivers and river valleys to facilitate inter-State coordination ensuring scientific planning of land and water resources taking basin/sub-basin as unit with unified perspectives of water in all its forms (including precipitation, soil moisture, ground and surface water) and ensuring holistic and balanced development of both the catchment and the command areas. Such legislation needs, inter alia, to deal with and enable establishment of basin authorities, comprising party States, with appropriate powers to plan, manage and regulate utilization of water resource in the basins.
Para 3.3 Ecological needs of the river should be determined, through scientific study, recognizing that the natural river flows are characterized by low or no flows, small floods(freshets),large floods, etc. , and should accommodate developmental needs. A portion of river flows should be kept aside to meet the ecological needs ensuring that the low and high flow releases are proportional to natural flow regime, including base flow contribution in the low flow season through regulated ground water use.
Para 3.4 Rivers and other water bodies should be considered for development for navigation as far as possible and all multipurpose projects over water bodies should keep navigation in mind right from the planning stage.
Para 8.1 Conservation of rivers, river corridors, water bodies and infrastructure should be undertaken in a scientifically planned manner through community participation. The storage capacities of water bodies and water courses and/or associated wetlands, the flood plains, ecological buffer and areas required for specific aesthetic recreational and/or social needs may be managed to the

extent possible in an integrated manner to balance the flooding, environment and social issues as per prevalent laws through planned development of urban areas, in particular.

Para 8.2 Encroachments and diversion of water bodies (like rivers, lakes, tanks, ponds,etc.) and drainage channels (irrigated area as well as urban area drainage) must not be allowed, and wherever it has taken place, it should be restored to the extent feasible and maintained properly.

Para 10.3 In order to prevent loss of land eroded by river, which causes permanent loss, revetments, spurs, embankments etc, should be planned , executed, monitored and maintained on the basis of morphological studies. This will become increasingly more important, since climate change is likely to increase rainfall intensity, and hence soil erosion.

Para 13. Even while accepting the principle of basin as a unit of development, on the basis of practicability and easy implementability, efforts should be made to enter into 12 international agreements with neighbouring countries on bilateral basis for exchange of hydrological data of international rivers on near real time basis.

Para 13.2 Negotiations about sharing and management of water of international rivers should be done on bilateral basis in consultative association with riparian States keeping paramount the national interest. Adequate institutional arrangements at the Center should be set up to implement international agreements.

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